

ABSTRACT

A system and method for mobility support handles address changes of a mobile host to provide transparent session continuity without packet overhead or the need for assistance of an agent on the network. When the mobile host changes to a new address, its old address is deprecated. The mobile host sends an address change message to each of its correspondent hosts over a secured control channel and preferably through a tunnel created based on the old and new addresses. Upon receiving the notification, the correspondent host returns an acknowledgment through the control channel and modifies its security filters and transport control parameters corresponding to the connection with the mobile host to use the new address. After receiving the acknowledgment, the mobile host modifies its security filters and transport control parameters for the connection to use the new address. As a result, the connection between the mobile host and the correspondent host has migrated to the new mobile host address. The migration is transparent to applications on the mobile and correspondent hosts and without the assistance of an agent.